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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,232	01/09/2001	Khiem Le	059864.00633	6982

32294 7590 10/24/2008

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EXAMINER	
CORRIELUS, JEAN M	

ART UNIT	PAPER NUMBER
2162	

MAIL DATE	DELIVERY MODE
10/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/756,232	LE ET AL.	
	Examiner	Art Unit	
	Jean M. Corrielus	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,17,19,21-30,32-40 and 42-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15, 17, 19, 21-30, 32-40 and 42-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on July 30, 2008, in which claims 1-15, 17, 19, 21-30, 32-40 and 42-72 are presented for further examination.

Response to Arguments

2. Applicant's arguments filed July 30, 2008 have been fully considered but they are not persuasive. (See examiner remark).

Remark

3. Applicant asserted that the term "computer readable media" is shown in fig.2. It is important to note that fig.2 as mentioned by the applicant includes two terminal devices, items 20 and 30, wherein the first device terminal includes a compressor, item 22 and the second terminal device includes a decompression, item 32. There is no mentioned of computer readable media defines in the specification. Applicant has not shown how and where the "computer readable media" is described in the specification. Should the Applicant disagree with such objection to the specification, a clarification as to where the claimed language can be found in the specification.

4. Claims 32-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement ***has been withdrawn***.

5. Applicant asserted that the structure to the features of claims 51-52 and 67-68. The examiner disagrees with the precedent assertion. It is unclear how the means plus function as claimed is defined in the specification and how the terminal devices, items 20 and 30 of the specification support the means plus function as claimed. Clarification is advised.

6. With refer to 35 USC 101 rejection; applicant asserted that such rejection should be

withdrawn. Claims 69-72 recite "computer readable media". Claims 69-72 are directed to an appropriate manufacture within the meaning of 101. It appears that the context the computer readable media is described in the claims can be reasonably interpreted as referring to a transmission media rather than referring to a physical object. Such transmission media fails to be an appropriate manufacture or physical object under 35 USC 101 in the context of computer related inventions.

7. Claims 69-72 are not directed to a process within the meaning of 101, since they aren't a series of steps or act being performed, but instead a program which when executed would cause a series of process steps or acts to occur. Claims 69-72 fail to fall within a statutory category of invention. They are directed to a program themselves, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer and realize its functionality. They are also clearly not directed to a composition of manner. Therefore, claims 69-72 are non-statutory under USC 101.

8. The apparatus as recites in claims 60-66 would reasonably be interpreted by one of ordinary skill in light of the disclosure as referring to data signal within the computer system, rather than referring to as a physical object. The claimed elements of claims 60-66 refer to header decompression. Such header decompression is a data signal in a transmission medium. It appears that such data signal is not considered to fall within one of the four statutory categories of invention, see Annex IV. Therefore, such header decompression fails to store on an appropriate computer readable medium.

1. Applicant asserted that Holmes fails to disclose or suggest all of the elements of any of the presently pending claims. The examiner disagrees with the precedent assertion.

a. The present claim 1 is directed to a method of comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The reference item list is a previous items sent by a first computer, when a second request is made the current item list is compared with the previous sent items to determine whether additional has been added or a deletion ha been made. Such added data items or deletion of data items represent the type of classification.

b. In contrast, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list (***XXX, YYY, ZZZ***), so when a second record is received ***(AAA, …, BBB)***, the item list in the current record, which is the second record is compared with item list of the first record, which is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the

information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26).

c. Applicant asserted that Holmes does not disclose the claimed "using the classification type to control the communication". The examiner disagrees with the precedent assertion. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes whether there is a change represents the classification type (see col.2, lines 13-14) ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields as a token indicating the match ***(using the determined type of classification to control the communication and compression of the information***), wherein the token is sent with the record to indicate the change, see col.4, lines 47-49. Applicant should duly note that communicating header information is well established in the art of communication for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51), in order to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame, See col.11, lines 21-28.

Specification

9. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Applicant fails to provide antecedent basis for the claim terminology "computer readable media".

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Regarding claims 51-52 and 67-68, the "means plus function" renders the claim(s) indefinite because the structure of the claims is not described in the specification to make the scope of the claim definite. Use of the word “means" raises a presumption that the inventor intended to invoke section 112, 6th paragraph. But this presumption may be rebutted if the “means" clause recites sufficient structure to perform the function in its entirety. Applicant should duly note that the federal Circuit Court reasoned that if one uses means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. Since the specification is unclear as to the structure that corresponds to the claimed function the patentee has not paid the price for the convenience of using the means plus function claim format. Therefore, the section 112, 6th paragraph is not invoked for failing to identify specific structure as performing the claimed function.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claims 69-72 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 69-72 recite "computer readable media". Claims 69-72 are directed to an appropriate manufacture within the meaning of 101. It appears that the context the computer readable media is described in the claims can be reasonably interpreted as referring to a transmission media rather than referring to a physical object. Such transmission media fails to be an appropriate manufacture or physical object under 35 USC 101 in the context of computer related inventions.

Claims 69-72 are not directed to a process within the meaning of 101, since they aren't a series of steps or act being performed, but instead a program which when executed would cause a series of process steps or acts to occur. Claims 69-72 fail to fall within a statutory category of invention. They are directed to a program themselves, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer and realize its functionality. They are also clearly not directed to a composition of manner. Therefore, claims 69-72 are non-statutory under USC 101.

The apparatus as recites in claims 60-66 would reasonably be interpreted by one of ordinary skill in light of the disclosure as referring to data signal within the computer system, rather than referring to as a physical object. The claimed elements of claims 60-66 refer to

header decompression. Such header decompression is a data signal in a transmission medium. It appears that such data signal is not considered to fall within one of the four statutory categories of invention, see Annex IV. Therefore, such header decompression fails to store on an appropriate computer readable medium.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 1-3, 14, 15, 19, 21, 22, 30, 32-34, 40, 42-43 and 51-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Venters et al., (hereinafter "Venters") US Patent no. 5,579,316.

As to claim 1, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list ***(XXX, YYY, ZZZ)***, so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 8-9), so called ***references items***, and a current of record (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, similarly to the claimed "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes, whether there is a change, represents a classification type (see col.2, lines 13-14), see claimed ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields to modify the current record by a token indicating the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided by the Applicant in the specification, page 3, lines 2-5, wherein the

classification is based on whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list.

Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26).

Venters, on the other hand, discloses an analogous system that communicates header information for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by transmitting the well known header information as disclosed by Venters (col.6, lines 51-60), because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame.

As to claim19, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list (***XXX, YYY, ZZZ***), so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in

record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 8-9), so called ***references items***, and a current of record (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes whether there is a change represents the classification type (see col.2, lines 13-14) ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields to modify the current record by a token indicating the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26). Venters, on the other hand, discloses an analogous system that communicates header information for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no.

5,579,316) (see col.6, lines 51-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by transmitting the well known header information as disclosed by Venters (col.6, lines 51-60), because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame.

As to claim 32, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list (***XXX, YYY, ZZZ***), so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes represents a classification type (see col.2, lines 13-14) ***"determining a type of classification based on said***

comparing of the items of the lists". Holmes uses the matching data fields to modify the current record by a token indicating the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26). Venters, on the other hand, discloses an analogous system that communicates header information for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by transmitting the well known header information as disclosed by Venters (col.6, lines 51-60), because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame.

As to claim 40, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list (***XXX, YYY, ZZZ***), so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes represents the classification type (see col.2, lines 13-14) ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields to modify the current record by a token indicating the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of

the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26). Applicant should duly note that communicating header information is well established in the art of communication for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51) and Svanbro (col.5, lines 27-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by transmitting the well known header information, because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame.

As to claim 51, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains a item list ***(XXX, YYY, ZZZ)***, so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type,

see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 8-9), so called ***references items***, and a current of record (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is "***comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes whether there is a change represents the classification type (see col.2, lines 13-14) ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields to modify the current record by a token indicating the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26). Venters, on the other hand, discloses an analogous system that communicates header information for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by

transmitting the well known header information as disclosed by Venters (col.6, lines 51-60), because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame

As to claim 52, Holmes discloses analogous method of comparing the data items in the corresponding fields of the immediately preceding record with the data item in the current field. Holmes discloses a plurality of records (col.2, lines 8-9), wherein each record includes a list of fields, which refer as a list of item list. Stores a first record (record 1) received by a user, wherein record 1 contains an item list (***XXX, YYY, ZZZ***), so when a second record is received ***(AAA, …, BBB)***, the item list in the current record in the second record is compared with item list of the first record. Such second record is a reference item list. If the item list does not match, as in record 2, then the data item YYY is replaced by a token ***"..."*** would be identified to yield a decompressed. So the token is sent as indication of the comparison, so called classification type, see col.5, lines 48-57). In addition, Holmes discloses a plurality of records (col.2, lines 8-9), so called ***references items***, and a current of record (col.2, lines 11-12), which is ***a current item***. Holmes compares each data item in the current record, with each data item in the previous record (see col.2, lines 13-14) to determine whether there is a change, which is ***"comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items".*** Such determination of Holmes represents the classification type (see col.2, lines 13-14) ***"determining a type of classification based on said comparing of the items of the lists"***. Holmes uses the matching data fields to modify the current record by a token indicating

the match ***(using the determined type of classification to control the communication and compression of the information)*** for the purpose of alleviating the cost of maintaining and replicating structure data. Similarly to description provided in the specification, page 3, lines 2-5, wherein the classification is based on whether an item in the reference item list is in the current item list, or whether the item is in the reference item list and the whether the contents of the item in the current item list are the same as content as contents of the item in the reference item list. Holmes fails to explicitly communicate header information. However, Holmes defines the information from the database to send a query to a server and retrieve the data record matches the criteria set out in the database query and use that data record to perform the compression method (see col.4, lines 6-26). Venters, on the other hand, discloses an analogous system that communicates header information for efficiently transmitting a limited size data frame over a digital communication network, as evidence to Venters (US Patent no. 5,579,316) (see col.6, lines 51-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holmes' system by transmitting the well known header information as disclosed by Venters (col.6, lines 51-60), because such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network data frame.

As to claims 2, 21, 33 and 42, Holmes discloses the invention as claimed. In addition Holmes discloses the claimed "wherein the comparing determines a difference between said current item list and said reference item list" (col.4, lines 37-50; the unmatched data items). It is well established in the art to identify a change to one copy of a set of data by comparing a first set of data with a second set of data and propagating only the change to the location where other copies of that data is stored, as evidence to Holmes col.1, lines 54-57).

As to claims 3, 22, 34 and 43, Holmes discloses the invention as claimed. In addition Holmes discloses the claimed "sending information regarding said difference from the first entity to a second entity" (col.4, lines 40-44 difference between the unmatched items). It is well established in the art to identify a change to one copy of a set of data by comparing a first set of data with a second set of data and propagating only the change to the location where other copies of that data is stored, as evidence to Holmes col.1, lines 54-57).

As to claim 14, 15 and 30, Holmes discloses "sending information regarding a difference between an item in said current list and a corresponding item in said reference item list" (is old and well known in Venters (US Patent 5,579,316), col.7, lines 30-66), lines transmitting the unmatched item based on the comparison between the item list and the reference item list; see and "whether the item is in the reference item list".

As to claims 53-68, Holmes and Venters substantially discloses the invention as claimed. In addition, Venters discloses the claimed "decompressing the received header information"

(col.10, lines 1-52).

Claims 69-72 are computer programs comprising instructions to perform the method of claim 1 above. They are, therefore, rejected under the same rationale.

17. Claims 4-13, 17, 23-29, 35-39 and 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 in view of Venters (US Patent 5,579,316) and further in view of Svanbro et al (hereinafter Svanbro") US Patent no. 6,535,925.
As to claim 4 and 25, Holmes and Venters disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the use of encoding the information regarding said difference prior to sending said information from said first entity to said second entity. On the other hand, Svanbro discloses the claimed feature "encoding the information regarding said difference prior to sending said information from said first entity to said second entity" (col.5, line 15-21, compression technique). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes' fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 6 and 27, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Svanbro discloses the claimed "wherein encoding the information

comprises encoding information regarding which item in said reference item list is not in said current item list" col.5, line 15-21, compression technique).

As to claims 7-11 and 28, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Svanbro discloses the claimed "wherein encoding the information comprises encoding information regarding content of at least one item in said reference item list" col.5, line 15-21, compression technique).

As to claim12, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Svanbro discloses the claimed "wherein said information further comprises a type of encoding" (col.5, lines 5-58).

As to claim 13, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Svanbro discloses the claimed "wherein said type of encoding comprises one of: an insertion encoding scheme, a removal encoding scheme and a content change encoding scheme" (col.5, lines 5-58).

As to claim 14, Holmes, Venters and Svanbro disclose the invention as claimed. In addition, Holmes discloses the claimed "sending information regarding a difference between an item in

said current item list and a corresponding item in said reference item list" (col.6, lines 5-10).

As to claim 15, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Holmes discloses the claimed "wherein said type of classification is based on at least one of: whether an item in said reference item list is in said current item list, whether said item is in said reference item list and whether contents of said item in said current item list are the same as contents of said item in said reference item list" (col.7, lines 24-36)..

As to claim 17, Holmes, Venters and Svanbro substantially disclose the invention as claimed. In addition, Holmes discloses the claimed sending said, reference item list from a first entity to a second entity (col.5, lines 16-56).

As to claims 23-29, 35-39 and 44-50, the limitation of these have been mentioned in the rejection of claims 4-13 and 17 above. They are, therefore, rejected under the same rationale. In addition, Svanbro discloses the claimed feature "wherein said information further comprises a type of encoding" (col.5, lines 15-col.6, line 65). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the

amount of data to be transferred.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean M Corrielus/
Primary Examiner, Art Unit 2162

October 24, 2008